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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/738,208	12/15/2000	John R. Milton	10005368-1	1142

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

TRAN, QUOC A

ART UNIT PAPER NUMBER

2176

DATE MAILED: 10/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/738,208

Applicant(s)

MILTON, JOHN R.

Examiner

Quoc A. Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08/25/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-11 and 13-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is responsive to RCE and Amendment concurrently filed 08/25/2005, with acknowledgement of original filing date of 12/15/2000.
2. Claims 2-11 and 13-20 are currently pending in this application. Claims 2, 7 and 13 are independent claims. Applicant cancelled claims 1 and 12.

### **Continued Examination Under 37 CFR 1.114**

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/25/2005 has been entered.

### **Response to Arguments**

4. Applicant's arguments with respect to claims 2-11 and 13-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

6. **Claims 2, 4-7, 9-13 and 15-20** are rejected under 35 U.S.C. 103(a) as being unpatentable by Bornstein et al. US006424362B1 - filed 02/01/1999 (hereinafter Bornstein '362), in view of Gong et al. US 20020138528A1 – provisional application No. 60/254,535 filed 12/12/2000 (hereinafter Gong '528).

**In regard to independent claim 2, a processor circuit having a processor and a memory and an original article comprise an amount of text expressing an amount of conceptual information** (Bornstein '362 at col. 3, line 40 through col. 4 line 65, also see Fig. 1-2, discloses a computer system included Central Processing Unit (item 10) and memory (item 16), also illustrating in Fig. 2, a sample of an original article before the summarization took place),

**and article pruning logic stored on the memory and executable by the processor** (Bornstein '362 at col. 3, lines 40-60, also see Fig. 1, discloses a computer system included Central Processing Unit (item 10) and memory (item 16) which stores the interactive document summarization as being carried out by CPU) Examiner read the above in the broadest reasonable interpretation to the claim limitation, wherein article pruning would have been an obvious variant of document summarization, to a person of ordinary skill in the art at the time the invention was made,

**the article pruning logic comprising logic to automatically reduce a length of an original article to fit within a predefined space allocation of a publication comprise: logic to create a pruning copy of the original article to be reduce** (Bornstein '362 at col. 3, lines 40-60, also see Fig. 1, discloses a computer system that includes a means of automatic abstracting wherein an extract of a document (i.e., a selection of sentences from the document) can serve as an abstract, also Bornstein '362 at col. 4, line 45 through col. 8, line 65, also see Fig. 2-8, as

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illustrating by Fig. 2, a sample screen from the system before it has summarized the document can be seen and referring now to FIG. 3, the user has moved the slider (item 203) to indicate that he only wants a summary one-eighth the size of the original document (note that predetermined summarization settings, wherein the system automatically generates a preset amount of summarization according to previously set system or user values, are equally supportable with the present invention) to be displayed within the document summary window (item 201). The summary now fits within the window, as indicated by the empty scroll bar (item 205) on the right hand side of the summary, also another useful application as such, using the summarization engine to display "show top sentence" option, wherein the amount of the top sentence displayed is limited by the amount of window display space allotted to this field) Examiner read the above in the broadest reasonable interpretation to the claim limitation, wherein logic to create a pruning copy and a predefined space allocation of a publication would have been an obvious variant of automatic abstracting wherein an extract of a document and (i.e., a selection of sentences from the document) can serve as an abstract and the amount of the top sentence displayed is limited by the amount of window display space allotted to this field, to a person of ordinary skill in the art at the time the invention was made,

**logic to remove an amount of text from the pruning copy, thereby creating a reduced pruning copy, wherein an amount of text in the reduced pruning copy is less than the amount of text in the original article** (Bornstein '362 at col. 4, line 45 through col. 8, line 65, also see Fig. 2-8, as illustrating by Fig. 2, a sample screen from the system before it has summarized the document can be seen and Referring now to FIG. 3, the user has moved the slider (item 203) to indicate that he only wants a summary one-eighth the size of the original

document (note that predetermined summarization settings, wherein the system automatically generates a preset amount of summarization according to previously set system or user values, are equally supportable with the present invention) to be displayed within the document summary window (item 201)) Examiner read the above in the broadest reasonable interpretation to the claim limitation, wherein reduced pruning copy would have been an obvious variant of summary one-eighth the size of the original document, to a person of ordinary skill in the art at the time the invention was made.

Bornstein '362 does not explicitly teach, **logic to determine whether the conceptual information as expressed by the text of the reduced pruning copy is compromised relative to the conceptual information as expressed by the text of the original article**, however (Gong '528 at page 2, paragraphs [0016]-[0018], discloses text summarization method, to includes a means of selecting the sentences having the largest index values with the most important singular vectors as part of the text summary measure the relevance between the document as a whole and each of its sentences; select the most relevant sentence in the context of the entire document; and eliminate all the terms contained in the selected sentence) Examiner read the above in the broadest reasonable interpretation to the claim limitation, wherein logic to determine whether the conceptual information as expressed by the text of the reduced pruning copy would have been an obvious variant of select the most relevant sentence in the context of the entire document; and eliminate all the terms contained in the selected sentence, to a person of ordinary skill in the art at the time the invention was made.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Bornstein '362 teaching, wherein the article pruning logic

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to automatically reduce a length of an original article to fit within a predefined space allocation of a publication, to includes a means of determine whether the conceptual information as expressed by the text of the reduced pruning copy is compromised relative to the conceptual information as expressed by the text of the original article of Gong '528. One of the ordinary skills in the art would have been motivated to perform such a modification to provide an accurate and useful summarization of the content of text document (as taught by Gong '528 at the Abstract).

**In regard to independent claims 7 and 13**, incorporate substantially similar subject matter as cited in claim 2 above, and are similarly rejected along the same rationale.

**In regard to dependent claims 5, 6, 10, 11, 16 and 17**, incorporate substantially similar subject matter as cited in claim 2 above, and are similarly rejected along the same rationale.

**In regard to dependent claim 4** incorporate substantially similar subject matter as cited in claim 2 above, and further view of the following, and are similarly rejected along the same rationale,

**logic to obtain for obtain a first value measuring the content of the original article by performing an analysis of the content of the original article; logic to obtain a second value measuring the content of the pruning copy by performing an analysis of the content of the pruning copy; and logic to compare a ratio of the first value to the second value to a predefined threshold ratio**, however (Gong '528 at page 2, paragraphs [0016]-[0018], discloses text summarization method, to includes a means of selecting the sentences having the largest index values with the most important singular vectors as part of the text summary measure the relevance between the document as a whole and each of its sentences; select the most relevant

sentence in the context of the entire document; and eliminate all the terms contained in the selected sentence) Examiner read the above in the broadest reasonable interpretation to the claim limitation, wherein logic to determine whether the conceptual information as expressed by the text of the reduced pruning copy would have been an obvious variant of select the most relevant sentence in the context of the entire document; and eliminate all the terms contained in the selected sentence, to a person of ordinary skill in the art at the time the invention was made.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Bornstein '362 teaching, wherein the article pruning logic to automatically reduce a length of an original article to fit within a predefined space allocation of a publication, to includes a means of determine whether the conceptual information as expressed by the text of the reduced pruning copy is compromised: logic to obtain a first value measuring the content of the original article by performing an analysis of the content of the original article; logic to obtain a second value measuring the content of the pruning copy by performing an analysis of the content of the pruning copy; and logic to compare a ratio of the first value to the second value to a predefined threshold ratio of Gong '528. One of the ordinary skills in the art would have been motivated to perform such a modification to provide an accurate and useful summarization of the content of text document (as taught by Gong '528 at the Abstract).

**In regard to dependent claims 9 and 15**, incorporate substantially similar subject matter as cited in claim 4 above, and are similarly rejected along the same rationale.

**In regard to dependent claims 18, 19 and 20**, incorporate substantially similar subject matter as cited in claims 2 and 4 above, and are similarly rejected along the same rationale.



7. **Claims 3, 8 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable by Bornstein et al. US006424362B1 - filed 02/01/1999 (hereinafter Bornstein '362), in view of Gong et al. US 20020138528A1 – provisional application No. 60/254,535 filed 12/12/2000 (hereinafter Gong '528), further in view of Kupiec et al. US006766287B1- filed 12/15/1999 (hereinafter Kupiec '528).

**In regard to dependent claim 3, further comprises the logic to remove a last paragraph of the pruning copy, however** (Kupiec '528 at col. 2 line 10 through col. 5, line 40, also see Fig. 3 and 4, provides a text summarization routine, wherein the paragraph and sentence position factor may be assigned (e.g. first 5 paragraphs, last five paragraphs and some paragraphs in the middle), indicating where the paragraphs and sentences lie within the document in referenced to the collections of heterogeneous documents) Examiner read the above in the broadest reasonable interpretation to the claim limitation, wherein the logic to remove a last paragraph of the pruning copy would have been an obvious variant of a text summarization routine, wherein the paragraph and sentence position factor may be assigned (e.g. first 5 paragraphs, last five paragraphs and some paragraphs in the middle), indicating where the paragraphs and sentences lie within the document in referenced to the collections of heterogeneous documents, to a person of ordinary skill in the art at the time the invention was made.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Bornstein '362 teaching, wherein the article pruning logic to automatically reduce a length of an original article to fit within a predefined space allocation

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of a publication, to includes a means of determine whether the conceptual information as expressed by the text of the reduced pruning copy is compromised relative to the conceptual information as expressed by the text of the original article of Gong '528, further comprises pruning logic to remove a last paragraph of the pruning copy of Kupiec '528 . One of the ordinary skills in the art would have been motivated to perform such a modification to provide an accurate and useful summarization of the content of text document (as taught by Gong '528 at the Abstract).

**In regard to dependent claims 8 and 14**, incorporate substantially similar subject matter as cited in claim 3 above, and are similarly rejected along the same rationale.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Vu et al

US 20020078091A1

filed 07/18/2001

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quoc A. Tran whose telephone number is (571) 272-4103. The examiner can normally be reached on Monday through Friday from 9 AM to 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Herndon R. Heather can be reached on (571) -272-4136. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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*Quoc A, Tran*  
*Patent Examiner*  
*Technology Center 2176*  
*October 24, 2005*

*William L. Bashore*  
**WILLIAM BASHORE**  
**PRIMARY EXAMINER**  
*10/27/2005*